A COMPARATIVE STUDY OF SELECTED MOTOR FITNESS COMPONENTES BETWEEN UNIVERSITY LEVEL TABLE TENNIS AND BADMINTON PLAYERS FROM R.T.M NAGPUR UNIVERSITY.

A Proposal Submitted
To
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CHAPTER -1
INTRODUCTION

The future of a nation depends upon the future of its children/players proper upbringing of the children goes a long way in the development of wellbeing of nation participation in physical education and sports programme is essential for realizing true potential. Every nation is becoming increasingly concerned about the physical fitness of its youth, recognizing that the physical fitness is fundamental of contributory to happy and useful living in any capacity.

In the last few decades sports have gained tremendous popularity all over the globe. The popularity of sports is still increasing at a fast pace and this happy trend is likely to continue in the future also. When one looks at the history of the Modern Olympic Games one sees that the number of sports for which competitions are held at Olympic Games has increased steadily. The total number of participating countries and sportsmen has also increased steadily. In addition to Olympic Sports indigenous sports have also become popular in each come into existence and are quite popular with the masses. The television and press are giving much more coverage of sports and have become effective medium to carry sports to millions and millions of people around the world. Sports have become an important social and cultural activity of the modern world which is being given the rightful place it deserves by the nations and societies of the world.1.

The actual model of Science of Sports Training reveals that this important area utilizes theories of training from different disciplines of Sports Sciences namely Exercise Physiology, Sports Psychology, Sports Bio-mechanics, Sports Sociology, Sports Medicine, Sports Nutrition and the like and applies appropriate means and methods of training for enhancing the status of different motor components e.g. strength, endurance, speed, flexibility and co-ordination besides acquiring complete technical and tactical mastery. The time when sports were nothing more than an enjoyable recreation for individual is irrevocably past. The phenomenon of sports today intervenes in almost all fields of human endeavour and very often it even has a central position.

1Hardiyal Singh, Science of Sports Training (D.V.S. Publications, New Delhi,1993),Sports, thus has experienced an enormous extension quantitatively as well as qualitatively with many positive but also some negative aspects.

Contemporarily sport is a wide term, which includes games, athletics and swimming. It is used in terms of recreation. Actually sports mean such activities where the pattern of movements does not change. Sports are generally individualistic and games are team activities where the movement of the body changes from one action to another as in the case of games like Football (Soccer), Hockey, Basketball, etc. In these games certain movements are done to outwit the opponent, they require more elaborate organization and strategies based on intense competition.

Sports contribute to physical fitness through intensive training provided for competition. In this era to develop the standard of the game, the players and coaches should have the knowledge of the scientific principles of sports training and must follow them while practicing to enhance the physiological, physical and psychological parameters along with the proper technique and tactics.

Every human being has a fundamental right to access to physical activities and sports, which are essential for the full development of his personality. The freedom to develop physical, intellectual and moral powers through physical education and sports must be guaranteed both within the educational system and in other aspects of social life. 3 The word physical refers to the body. It is often used in reference to various bodily characteristics such as physical strength physical health and physical appearance.

It refers to the body as contrasted to the mind. Therefore when the word education is added to the word physical, thus forming the phrase physical education, it refers to the process of education that concerns activities that develop and maintain the human body. When an individual is performing any of the game or physical education activities, education is taking place at the same time. This education may be conductive to the enrichment of the individual life or it be unhappy one. It may help build strong and cohesive society or it may have antisocial results for the participants.

(The Mosby Co. St. Louis, Toronto, 1983), p.7. 5 K. Sondhi, History of the World (Ancient), Part 11, (New Delhi : Vikas Publication, 1952), pp.128-33. 3 Presidents Council on physical fitness and sports, Physical fitness research Digest (1st July 1977), p.112.

Whether physical education helps or inhabits the attainment of education and its objects will depend greatly on the leadership responsible for its direction. The term physical education in much broader and much meaningful for day to day life. It is more closely allied to the larger area of education, of which it is a vital part. It implies that its programme consists of something other than more exercise done on command. A physical education programme under qualified leadership aids in the enrichment of an individual life. Physical education is an internal part of total education process which has its aim the development of physically, mentally, emotionally and socially fit citizen through the medium of physical activities which have been selected with a view of realizing these out comes. 4 A well planned physical education programme has to be developed throughout the nation to improve the physical fitness, motor fitness and general motor ability of the young generation. So that they may lead a healthy life and serve the nation better. Healthy mind in healthy body is a fine minim, to accomplish and perfect it has achieving the ground of good health. All work and no play makes a man bored and leads to unusual insufficiency and flow output. for the welfare of mind as all as for body incentives towards physical exuberance is must. A physically fit child is the pride of the nation. The children are world's greatest sources. Investment, in Childs development is an investment in future of a nation.

Today child will be the tomorrow's leader and scientist. Because children are our future, our most precious resources, Charles A. Bucher, Foundation of Physical Education and Sports, Edition 9th, the quality of tomorrow's world perhaps even fits survival will be determined by wellbeing, safely and development of today's children.

A weak child is a week brick in the wall of nation. Today's child is tomorrows citizens in whose hands threw fate and prosperity of the nation lies. According to Victor, "Fitness is a transitory state and the physically fit person of the moment can be unfit tomorrow if the fails to keep the habit, of exercise.

7 John E. Nixon and ANNE JEWETT, An Introduction to Physical Education (Philadelphia : W.B. Saunders Co., 1969), p.196.2MantuBaro. " A Comparative Effect of Training in Small Playfield and Regular Official Size Playfield on the Performance of Soccer Players" (Unpublished Master's Dissertation, S.G.B.A.University, Amravati), 2007, p- 2

"Swami Vivekananda says, "Our young men must be strong. Religion will comeafterwards, be strong my friends, that is my advice to you. You will be nearer to heaven through the study of Gita. You will understand the mighty genius and the mighty strength of Krishna better with a little of strong blood in you. You will understand the Upanishads better and the glory of Atma, when your body stands from upon your feet. What I want is muscle of iron and nerves of steel, inside which dwells a mind of the same material as that of which is the thunderbolt is made.

MOTOR FITNESS

Physics engine is a term that describes the ability of an athlete to perform effectively during sports or other physical activities. Fitness Motor Athlete motor capacity is a combination of five different elements, each of which is essential for a high level of performance. Fitness Motor improving the condition of the engine consists of a training regimen of five. There are many different manifestations of fitness. Fitness Motor some examples are strength, endurance, speed and flexibility. Some types of fitness, such as cardiovascular health status of an athlete, are more important than others. Fitness Motor an athlete must be aware of the different types of capacity to develop an effective training program that focuses on small and large dots.

Motor capacity or ability of the engine relates to the manner in which an athlete can carry in their sport, Fitness Motor involving a mixture of agility, coordination, motor fitness definition balance, power and reaction time. Improve the way fitness is an indirect consequence of training in one of these attributes. Motor fitness definition The five physical components are essential to compete at high levels, Fitness Motor so that the concept is considered an essential part of the training regimen of any athlete.

Agility refers to the ability of the body to perform fast movements in different directions. Fitness Motor sometimes described as the speed at which an athlete is able to change direction while competing in the field or in the field. Motor fitness definition improving agility sprint often involves the cones that are placed at different angles. Coordination is more difficult to

describe than the speed because it cannot be.

Observed directly. Motor fitness definition an athlete with a high level of coordination is able to combine all forms of fitness – not just those who are part of the physics engine – in an efficient and controlled. Motor fitness definition the more coordinated an athlete is the most effective, Fitness Motor he or she will be in competitive activities.

Power refers to the ability of the athlete's muscles to contract strongly in an explosive movement. Motor skill fitness most people have an intuitive sense of what power is and why it is important for the sport. Fitness Motor Powerful Athletes are not only strong, motor skill fitness they are able to use this strength quickly and efficiently.

Statement of the Problem

The problem of the present study is stated as, "Comparative Study of selected motor fitness components between University Level Table Tennis and Badminton players from R.T.M.Nagpur University.

Objectives of the Study

1. To measure the Leg power, Agility, Speed, Reaction time, Co-ordination, Flexibility and Dynamic Balance between the Boy's Table Tennis and Badminton Players.

2. To compare the selected motor fitness components as the Leg power, Agility, Speed, Reaction Time, flexibility and dynamic balance of Inter-Collegiate level Table Tennis and Badminton Players.

Significance of the study

The result of this study would be contributed significantly as follows.

1. The result of this study will provide a guide line to the Physical Education

Teacher, Coaches and Trainers in preparing the Training Schedule.

2. The finding of this study would act as diagnosis purpose.

3 The finding of this study will help to identification of Talent.

Hypothesis

1. There will be a significant difference in leg power between the selected motor fitness components of Table Tennis and Badminton players.

2. There will be a significant difference in reaction time between the selected motor fitness components of Table Tennis and Badminton players.

3. There will be a significant difference in speed between the selected motor fitness components of Table Tennis and Badminton players.

4. There will be a significant difference in agility between the selected motor fitness components of Table Tennis and Badminton players.

5.There will be significant difference in flexibility between the selected motor fitness components of Table Tennis and Badminton players.

6.There will be significant difference in dynamic balance between the selected motor fitness components of Table Tennis and Badminton players.

Delimitation

The study will delimited to the following aspects:

I. The study will delimited to following selected motor fitness components only: a) Leg Power b). Agility c). Speed d). Reaction Time e).Flexibility f). Dynamic Balance

II. The study wills delimitation to inter collegiate level Table Tennis and Badminton players only.

III. Age of the subjects will be delimited to ranging from 18-25 years.

IV. The subjects for the study limited to male players only.

V. Only 300 subjects will selected for the study.

VI. The test will conduct in University Competition.

Limitations

1 The researcher has no control over the leisure time activities of the subjects.

2 Socio-economic status of the subjects will not considered.

3 The researcher has not any control over the dietary habits of the subjects.

4 Education and coaching background of the subjects will not taken into consideration.

5 The researcher has not any control over the mood of player at the time of conducting the test

6 The researcher has not any control over the schedule of tournament and availability of Players.

Operational Definition of the Terminologies

LEG POWER:

Leg power is the ability of the body to release maximum force muscle contraction in shortest possible time of Nagpur university Table tennis and Badminton university Players.

AGILITY:

Agility is the ability of the parts of the body to change direction rapidly and accurately at the time of conducting the test of S.T.M Nagpur university Table tennis and Badminton university Players.

SPEED:

It is the ability to perform a movement in a short period of time S.T.M Nagpur University Table Tennis and Badminton University Players.

REACTION TIME:

The interval of time between the presentation of stimulus and the initiation of the response at the time of conducting the test of Nagpur university Table tennis and Badminton university Players.

Flexibility:

It is used to measure the flexibility of the back and leg (hamstring) muscles of Nagpur University Table Tennis and Badmintion players.

Dynamic Balance:

This is also used to measure the dynamic balance of the body of Nagpur University Table Tennis and Badminton players.

CHAPER -2

REVIEW OF RELATED LITERATURE:

In this chapter the researcher reviews the important literatures related to the study. The purposes of review of related literature are to expand the context and background of the research as well as to provide a basic for the formulation of hypothesis and provide evidences. The review makes the readers up to date in the concern area.

Dr. Kuldeep Nara 2017, the present study was an attempt to find out the difference in physical fitness level between Badminton and football players. The sample for this study consisted of 150 subjects each belonging to Badmintonand football from Haryana, who had represented their schools and colleges in various state level tournaments were selected as the subjects for the study. The Criterion measures from AAPHER Physical fitness test have been chosen for this study. Mean, Standard deviation and‘t’ Test were used to analyse the data Findings of the study revealed that: (i) Football players was found better in 50-yard dash than Badmintonplayers.

Ajay Pal Bhadu and Dr. Poonam Singh2016, the purpose of this study was to compare speed, agility, anaerobic strength and some anthropometric characteristics of male Badminton and Table Tennis Players. The sample of the study comprised of male Badminton and Table Tennis team players participating in north zone intervarsity tournament (17-24 aged) (n1=24) (n2=24). Within the scope of the study, the following techniques were applied: 30-meter speed test for determining speeds of the players, Illinois agility test for determining agility of the players.

Vishal Subhash Pawar 2016, the aim of the present study is to compare the speed ability among male Football and male Hockey Players of Pune. For the present study 38 male players were selected during the state championship. Between the age group of 14-16 years i.e. 19 male Football and 19 male Hockey Players of Maharashtra who have taken part in the

District sports and games during the year 2013-14 were taken for the study. The 50 meter run test was used to assess the speed among Football and Hockey Players. The results of the study show that the Football is having very good speed compare to the Hockey Players.

Dr. K. MURALIRAJAN, S.SARAVANA SUDARSAN 2015 The purpose of the study was to compare the motor fitness components among different match practice teams. To achieve this purpose fifty male sports person from the Alagappa University College of Arts and Science, Paramakudi, were selected as the subject. All subjects were practicing regularly and related from different team games like Hockey, Football, volleyball, Badmintonand handball, who had participated in Interuniversity were selected as the subject for this study. Their age ranged from 18 to 21 year old, the study was confined to the selected motor fitness components namely Muscular Endurance, Speed, and Agility. The data of selected subject for motor fitness components (muscular endurance, speed, and Agility) were recorded by different measures.

There is significant difference found between the mean value of motor fitness components (muscular endurance (F= 62.67) and agility (F= 3.104) among different match practice group. And no significant differences were found for the mean value of speed (F=2.227) among different match practice

CHAPER -3

METHODOLOGY

In this chapter, sources of data, selection of subjects, sampling procedure, selection of variables, selection of tests and criterion measures, collection of data, administration of tests, administration of training programme and processing of data are described.

Sources of data

The required data will collected on selected inter-collegiate player of Table Tennis and Badminton players of “R.T.M. Nagpur University” will the source of data.

Selection of subjects

150 Table Tennis and 150 Badminton male players those who selected inter-collegiate tournament of University areas were chosen as the subjects. The age of subjects will ranging from 18-25 years as registered from their age certificate card.

Sampling procedure

Purposive Sampling method will be adopted for the selection of subjects.

Selection of variables

Leg power
Agility
Speed
Reaction time
Flexibility
Dynamic Balance

Selection of Test and Criterion Measures

The criterion measures of motor fitness abilities are as follows:-

- To measure Leg power – Vertical Jump
- To measure Agility – Shuttle Run
- To measure speed - 50 Yard Dash
- To measure Reaction Time – Nelson's Hand Reaction Time.
- Flixibility – Sit and reach test.
- Dynamic balance – The nelson Balance beam test.

Collection of data

Before collection of data, the research scholar was explained the purpose of the study to the subjects and explain the method of performance and demonstrate the way to perform the task in front of the subjects. The data pertaining to the study data were collected on the selected subjects by administering the above mentioned tests following the foretasted description.

CHAPER - 4

ANALYSIS OF DATA AND RESULT OF THE STUDY

In this chapter on the basis of collection of data analysis will be made by applying appropriate statistical procedure and on the basis of analysis of data result of the study will be drawn.

CHAPER – 5

SUMMARY, CONCLUSION AND RECOMMENDATION

On the basis of Analytical of the data and the result of the study summary will be made and basis of the summary, conclusion will be drawn and on the basis of summary and conclusion, recommendation will be made.

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